OVERHEAD GEARED TRACTION
DESIGN GUIDE
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STRETCHER REQUIREMENTS:

Section 3002.4 of the International Building Code (IBC) states that "where elevators in buildings four or more stories above, or four or more stories below grade plane, at least one elevator shall be provided for Fire Department emergency access to all floors". According to the IBC Code, the elevator should accommodate an open stretcher in the horizontal position 24 inches x 84 inches with not less than 5-inch radius corners. The following configurations and minimum dimensions comply with these IBC requirements:

HOSPITAL / SERVICE / TRAUMA ELEVATORS

WITH FRONT OPENING DOORS

HOSPITAL / SERVICE / TRAUMA ELEVATORS

WITH FRONT & REAR OPENING DOORS
NOTES:
1. Dimensions shown are based on standard sizes and capacities for typical building installations and should only be used for preliminary planning. Contact H-W for additional information before proceeding with construction or for assistance with existing or special conditions.
2. Dimensional data complies with the ASME A17.1 / CSA B44 Safety Code for Elevators and Escalators. State or local codes must be used if they differ from national code.
3. Interior cab dimensions may vary depending on the interior finishes. The platform and hoistway sizes should be increased accordingly for extra thick cab finishes.
4. Counterweight safeties are required if there is "occupied space" below the pit. Add 8" [203] to the hoistway and machine room depths listed.

HOISTWAY AND MACHINE ROOM DIMENSIONS

<table>
<thead>
<tr>
<th>CAPACITY (lb [kg])</th>
<th>INSIDE AREA (MAX. SF ALLOWED PER CODE)</th>
<th>H CLEAR OPENING WIDTH [mm]</th>
<th>MINIMUM CLEAR CAB INSIDE</th>
<th>PLATFORM SIZE</th>
<th>HOISTWAY SIZE (NON-SEISMIC)</th>
<th>HOISTWAY SIZE (SEISMIC ZONE 2 OR GREATER)</th>
<th>MACH. ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000 [900]</td>
<td>24.2 [2.25]</td>
<td>3'-0&quot;</td>
<td>5'-8&quot; [1727]</td>
<td>6'-0&quot; [1920]</td>
<td>7'-4&quot; [2235]</td>
<td>7'-8&quot; [2337]</td>
<td>14'-6&quot;</td>
</tr>
<tr>
<td>2,500 [1160]</td>
<td>29.1 [2.70]</td>
<td>3'-6&quot;</td>
<td>6'-1&quot; [1815]</td>
<td>6'-6&quot; [1980]</td>
<td>8'-2&quot; [2438]</td>
<td>8'-7&quot; [2480]</td>
<td>15'-0&quot;</td>
</tr>
<tr>
<td>3,000 [1385]</td>
<td>33.7 [3.13]</td>
<td>4'-1&quot;</td>
<td>7'-1&quot; [2134]</td>
<td>7'-5&quot; [2212]</td>
<td>9'-0&quot; [2743]</td>
<td>9'-6&quot; [2834]</td>
<td>15'-0&quot;</td>
</tr>
<tr>
<td>3,500 [1600]</td>
<td>38.0 [3.53]</td>
<td>4'-6&quot;</td>
<td>8'-0&quot; [2438]</td>
<td>7'-5&quot; [2212]</td>
<td>10'-0&quot; [2990]</td>
<td>10'-1&quot; [3048]</td>
<td>15'-0&quot;</td>
</tr>
<tr>
<td>4,000 [1815]</td>
<td>42.2 [3.92]</td>
<td>5'-1&quot;</td>
<td>8'-2&quot; [2438]</td>
<td>8'-0&quot; [2438]</td>
<td>10'-0&quot; [2990]</td>
<td>10'-1&quot; [3048]</td>
<td>15'-0&quot;</td>
</tr>
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<td>4,000 [1815]</td>
<td>42.2 [3.92]</td>
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<td>8'-2&quot; [2438]</td>
<td>10'-0&quot; [2990]</td>
<td>10'-1&quot; [3048]</td>
<td>15'-0&quot;</td>
</tr>
</tbody>
</table>

a. These car dimensions and entrance types provide wheelchair accessibility.
b. These car dimensions and entrance types provide wheelchair accessibility and accommodate an ambulance type stretcher of (76"x24") in the horizontal position.
c. These car dimensions and entrance types provide wheelchair accessibility and accommodate an ambulance type stretcher of (84"x24") in the horizontal position as required by the IBC.
OVERHEAD GEARED TRACTION DESIGN GUIDE
Passenger, Front Opening, CWT at Rear

TOTAL CAR TRAVEL
OH1
- MIN. CLEAR OVERHEAD TO U/S OF MACHINE BMS.

OVERHEAD GEARED TRACTION MACHINE, MOUNTED ON MACHINE BEAMS OR ON STRUCTURAL SLAB

HOIST BEAM (BY OTHERS)

3'-6" (1067) HIGH CAR TOP RAILING AS REQ'D. BY ASME A17.1 / CSA B44 (BY H-W)

H-W CAR SLING AND PLATFORM ASSY.

H-W SAFETY AND GUIDE SHOES

COMPENSATION REQUIRED FOR TRAVELS OVER 130'-0"

MACH. RM.

7'-0" [2134]

MIN. CLEAR OVERHEAD BEAM (BY OTHERS)

TOTAL CAR TRAVEL
OH2
- MIN. CLEAR OVERHEAD TO U/S OF MACHINE BMS.

OVERHEAD GEARED TRACTION MACHINE, MOUNTED ON MACHINE BEAMS OR ON STRUCTURAL SLAB

HOIST BEAM (BY OTHERS)

7'-0" [2134]

HOIST WAY SECTION (DEFLECTOR SHV. IN MACHINE ROOM)

HOISTWAY SECTION (DEFLECTOR SHV. AT TOP OF HOISTWAY)

STL. PIT LADDER (BY OTHERS)

H-W CWT. FRAME WITH GUARD

H-W SPRING OR OIL BUFFERS MOUNTED ON PIT CHANNELS

PIT DEPTH

P - PIT

BOTT. FLR.

PIT FLR.

1'-0" [305] (TYP.)

4'-0" [1219] VERT. TOE GUARD AS REQ'D. BY ASME A17.1 / CSA B44 (BY H-W)

4'-0" [1219] ROUGH OPNG.

7'-6" [2349] (CL. OPNG.

7'-0" [2134] CL. OPNG.

3'-6" [1067] HIGH CAR TOP RAILING AS REQ'D. BY ASME A17.1 / CSA B44 (BY H-W)

3'-6" [1067] ROUGH OPNG.

H-W DEFLECTOR SHEAVE

HOIST WAY SECTION

PIT AND OVERHEAD DIMENSIONS

<table>
<thead>
<tr>
<th>RATED SPEED (fpm [m/s])</th>
<th>PIT DEPTH</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. AT TOP OF HOISTWAY)</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. IN MACHINE ROOM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 200 fpm (.50 - 1.00 m/s)</td>
<td>5'-6&quot; [1676]</td>
<td>14'-7&quot; [4445]</td>
<td>13'-5&quot; [4089]</td>
</tr>
<tr>
<td>250 - 350 fpm (1.25 - 1.75 m/s)</td>
<td>5'-8&quot; [1727]</td>
<td>15'-2&quot; [4623]</td>
<td>14'-0&quot; [4287]</td>
</tr>
<tr>
<td>400 fpm (2.00 m/s)</td>
<td>6'-0&quot; [1829]</td>
<td>15'-0&quot; [4725]</td>
<td>14'-4&quot; [4369]</td>
</tr>
<tr>
<td>450 fpm (2.25 m/s)</td>
<td>6'-8&quot; [2032]</td>
<td>16'-1&quot; [4902]</td>
<td>14'-11&quot; [4547]</td>
</tr>
<tr>
<td>500 fpm (2.50 m/s)</td>
<td>6'-8&quot; [2032]</td>
<td>16'-3&quot; [4953]</td>
<td>15'-1&quot; [4597]</td>
</tr>
</tbody>
</table>

Overhead dimensions (OH) are based on an 8'-0" [2438mm] cab height with a 7'-0" [2134mm] door. For 9'-0" [2745] cab use OH + 1'-0" [305]. For 10'-0" [3050] cab use OH + 2'-0" [610].

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# OVERHEAD GEARED TRACTION DESIGN GUIDE

**Passenger, Front Opening, CWT at Side**

## HOISTWAY PLAN

- **STL. PIT LADDER (BY OTHERS)**
- **DOOR TYPE: SSCO (SINGLE SPEED CENTER OPNG.)**
- **DOOR TYPE: SSSO (SINGLE SPEED SIDE OPNG.)**

## MACHINE ROOM PLAN

- **LOCATION OF MAIN POWER DISCONNECTING MEANS. THE CAR LIGHT DISCONNECTING MEANS, AND LIGHTING SWITCH SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF NFPA 70.**
- **VENTILATION AS REQUIRED (BY OTHERS).**

## NOTES:

1. Dimensions shown are based on standard sizes and capacities for typical building installations and should only be used for preliminary planning. Contact H-W for additional information before proceeding with construction or for assistance with existing or special conditions.
2. Dimensional data complies with the ASME A17.1 / CSA B44 Safety Code for Elevators and Escalators. State or local codes must be used if they differ from national code.
3. Interior cab dimensions may vary depending on the interior finishes. The platform and hoistway sizes should be increased accordingly for extra thick cab finishes.
4. Note: This arrangement does not have adequate space to accommodate counterweight safeties. Therefore, "occupied space" below the pit is not permitted with this arrangement.

### HOISTWAY AND MACHINE ROOM DIMENSIONS

<table>
<thead>
<tr>
<th>CAPACITY (lb [kg])</th>
<th>INSIDE AREA (MAX. SF ALLOWED PER CODE)</th>
<th>H CLEAR OPENING WIDTH [mm]</th>
<th>MINIMUM CLEAR CAB INSIDE</th>
<th>PLATFORM SIZE</th>
<th>HOISTWAY SIZE (NON-SEISMIC)</th>
<th>HOISTWAY SIZE (SEISMIC ZONE 2 OR GREATER)</th>
<th>MACH. ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000 [900]</td>
<td>24.2 [2.25]</td>
<td>3'-0&quot; [914]</td>
<td>5'-8&quot; [1727]</td>
<td>A 6'-0&quot; [1829]</td>
<td>6'-0&quot; [1829]</td>
<td>6'-0&quot; [1829]</td>
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</tr>
<tr>
<td>2,500 [1160]</td>
<td>29.1 [2.70]</td>
<td>3'-6&quot; [1067]</td>
<td>6'-4&quot; [2032]</td>
<td>A 7'-0&quot; [2134]</td>
<td>7'-0&quot; [2134]</td>
<td>7'-0&quot; [2134]</td>
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</tr>
<tr>
<td>3,000 [1360]</td>
<td>33.7 [3.13]</td>
<td>3'-9&quot; [1092]</td>
<td>6'-8&quot; [2032]</td>
<td>A 8'-0&quot; [2449]</td>
<td>8'-0&quot; [2449]</td>
<td>8'-0&quot; [2449]</td>
<td>9'-0&quot; [2794]</td>
</tr>
<tr>
<td>4,000 [1815]</td>
<td>42.2 [3.92]</td>
<td>4'-0&quot; [1219]</td>
<td>7'-4&quot; [2134]</td>
<td>A 9'-0&quot; [2794]</td>
<td>9'-0&quot; [2794]</td>
<td>9'-0&quot; [2794]</td>
<td>10'-8&quot; [3200]</td>
</tr>
</tbody>
</table>

a. These car dimensions and entrance types provide wheelchair accessibility.
b. These car dimensions and entrance types provide wheelchair accessibility and accommodate an ambulance type stretcher of (76"x24") in the horizontal position.
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OVERHEAD GEARED TRACTION DESIGN GUIDE
Passenger, Front Opening, CWT at Side

H-W OVERHEAD GEARED TRACTION MACHINE, MOUNTED ON MACHINE BEAMS OR ON STRUCTURAL SLAB

3'-6" [1067] HIGH CAR TOP RAILING AS REQ'D. BY ASME A17.1 / CSA B44 (BY OTHERS)

H-W DEFLECTOR SHEAVE

ROPE GRIPPER WITH MACHINE MOUNTING

H-W CAR SLING AND PLATFORM ASSY.

H-W SAFETY AND GUIDE SHOES

COMPENSATION REQUIRED FOR TRAVELS OVER 130'-0"

TOTAL CAR TRAVEL

STL. PIT LADDER (BY OTHERS)

H-W CWT. FRAME WITH GUARD

H-W SPRING OR OIL BUFFERS MOUNTED ON PIT CHANNELS

HOISTWAY SECTION (DEFLECTOR SHV. AT TOP OF HOISTWAY)

PIT AND OVERHEAD DIMENSIONS

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<th>RATED SPEED</th>
<th>PIT DEPTH</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. AT TOP OF HOISTWAY)</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. IN MACHINE ROOM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>fpm [m/s]</td>
<td>OH1</td>
<td>OH2</td>
<td></td>
</tr>
<tr>
<td>100 - 200</td>
<td>5'-6&quot; [1676]</td>
<td>14'-7&quot; [4445]</td>
<td>13'-5&quot; [4089]</td>
</tr>
<tr>
<td>200 - 350</td>
<td>5'-8&quot; [1727]</td>
<td>15'-2&quot; [4623]</td>
<td>14'-3&quot; [4267]</td>
</tr>
<tr>
<td>350 - 500</td>
<td>6'-0&quot; [1829]</td>
<td>15'-5&quot; [4725]</td>
<td>14'-4&quot; [4369]</td>
</tr>
<tr>
<td>400 fpm</td>
<td>6'-8&quot; [2032]</td>
<td>16'-1&quot; [4902]</td>
<td>14'-11&quot; [4547]</td>
</tr>
<tr>
<td>450 fpm</td>
<td>6'-8&quot; [2032]</td>
<td>16'-3&quot; [4953]</td>
<td>15'-1&quot; [4597]</td>
</tr>
<tr>
<td>500 fpm</td>
<td>6'-8&quot; [2032]</td>
<td>16'-3&quot; [4953]</td>
<td>15'-1&quot; [4597]</td>
</tr>
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</table>

Overhead dimensions (OH) are based on an 8'-0" [2438mm] cab height with a 7'-0" [2134mm] door. For 9'-0" [2745mm] cab use OH + 1'-0" [305]. For 10'-0" [3050mm] cab use OH + 2'-0" [610].

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Bulletin 1179
PUR #1084, EBB
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4. Counterweight safeties are required if there is "occupied space" below the pit. Add 10" [254] to the hoistway and machine room widths listed for each elevator.

### HOISTWAY AND MACHINE ROOM DIMENSIONS

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<tr>
<th>CAPACITY</th>
<th>INSIDE AREA (MAX. SF ALLOWED PER CODE)</th>
<th>H CLEAR OPENING WIDTH [mm]</th>
<th>OPENING TYPE (1)</th>
<th>MINIMUM CLEAR CAB INSIDE</th>
<th>PLATFORM SIZE</th>
<th>HOISTWAY SIZE (NON-SEISMIC)</th>
<th>HOISTWAY SIZE (SEISMIC ZONE 2 OR GREATER)</th>
<th>MACH. RM.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000 [900]</td>
<td>24.2 [2.25]</td>
<td>3'-0&quot; [914]</td>
<td>SSBO (a)</td>
<td>5'-8&quot; [1727]</td>
<td>4'-3&quot; [1295]</td>
<td>B DEPTH [mm]</td>
<td>6'-0&quot; [1829]</td>
<td>5'-3&quot; [1600]</td>
</tr>
<tr>
<td>4,000 [1815]</td>
<td>42.2 [3.92]</td>
<td>4'-3&quot; [1219]</td>
<td>SSBO (e)</td>
<td>7'-8&quot; [2337]</td>
<td>5'-5&quot; [1651]</td>
<td>8'-0&quot; [2438]</td>
<td>6'-2&quot; [1880]</td>
<td>10'-4&quot; [3150]</td>
</tr>
<tr>
<td>4,000 [1815]</td>
<td>42.2 [3.92]</td>
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<td>SSBO (f)</td>
<td>7'-8&quot; [2337]</td>
<td>5'-5&quot; [1651]</td>
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a. These car dimensions and entrance types provide wheelchair accessibility.
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OVERHEAD GEARED TRACTION DESIGN GUIDE
Passenger, Front Opening, CWT at Side, Glass-Back Cab

PIT AND OVERHEAD DIMENSIONS

<table>
<thead>
<tr>
<th>RATED SPEED</th>
<th>PIT DEPTH</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS.</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[fpm (m/s)]</td>
<td>[in (mm)]</td>
<td>(DEFLECTOR SHV. AT TOP OF HOISTWAY)</td>
<td>(DEFLECTOR SHV. IN MACHINE ROOM)</td>
</tr>
<tr>
<td>P</td>
<td>OH1</td>
<td>OH2</td>
<td>OH1</td>
</tr>
<tr>
<td>100 - 200 fpm</td>
<td>5'-6&quot; [1676]</td>
<td>14'-11&quot; [4547]</td>
<td>13'-5&quot; [4089]</td>
</tr>
<tr>
<td>[50 - 1.00 m/s]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250 - 350 fpm</td>
<td>5'-8&quot; [1727]</td>
<td>15'-0&quot; [4572]</td>
<td>14'-0&quot; [4287]</td>
</tr>
<tr>
<td>[1.25 - 1.75 m/s]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400 fpm</td>
<td>6'-0&quot; [1829]</td>
<td>15'-10&quot; [4826]</td>
<td>14'-4&quot; [4369]</td>
</tr>
<tr>
<td>[2.00 m/s]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>450 fpm</td>
<td>6'-8&quot; [2032]</td>
<td>16'-5&quot; [5004]</td>
<td>14'-11&quot; [4547]</td>
</tr>
<tr>
<td>[2.25 m/s]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500 fpm</td>
<td>6'-8&quot; [2032]</td>
<td>16'-7&quot; [5055]</td>
<td>15'-1&quot; [4597]</td>
</tr>
<tr>
<td>[2.50 m/s]</td>
<td></td>
<td></td>
<td></td>
</tr>
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**OVERHEAD GEARED TRACTION DESIGN GUIDE**  
**Passenger, Front & Rear Opening, CWT at Side**

**HOISTWAY PLAN**

**MACHINE ROOM PLAN**

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<tr>
<td>3,500 [1605]</td>
<td>38.0 [3.53]</td>
<td>3'-6&quot; [1067]</td>
<td>SSCO (b) SSCO (c)</td>
<td>A [852] [1295]</td>
<td>B [579] [861]</td>
<td>C [610] [920]</td>
<td>D [686] [1092]</td>
<td>E [745] [1193]</td>
</tr>
<tr>
<td>4,000 [1815]</td>
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Passenger, Front & Rear Opening, CWT at Side

PIT AND OVERHEAD DIMENSIONS

<table>
<thead>
<tr>
<th>RATED SPEED</th>
<th>PIT DEPTH</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. AT TOP OF HOISTWAY)</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. IN MACHINE ROOM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>fpm [m/s]</td>
<td>P OH1</td>
<td>OH2</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>100 - 200 fpm [5.0 - 1.00 m/s]</td>
<td>0' - 6' [1576]</td>
<td>14' - 11' [4547]</td>
<td>13' - 5' [4089]</td>
</tr>
<tr>
<td>250 - 350 fpm [1.25 - 1.75m/s]</td>
<td>0' - 8' [1727]</td>
<td>15' - 0' [4724]</td>
<td>14' - 0' [4267]</td>
</tr>
<tr>
<td>400 fpm [2.00 m/s]</td>
<td>6' - 0' [1829]</td>
<td>15' - 10' [4826]</td>
<td>14' - 4' [4368]</td>
</tr>
<tr>
<td>500 fpm [2.50 m/s]</td>
<td>6' - 8' [2032]</td>
<td>16' - 7' [6055]</td>
<td>15' - 1' [4597]</td>
</tr>
</tbody>
</table>

Overhead dimensions (OH) are based on an 8' - 0" [2438mm] cab height with a 7' - 0" [2134mm] door._for 9'-0" [2745] cab use OH + 1'-0" [305]. For 10'-0" [3050] cab use OH + 2'-0" [610].
NOTES:

1. Dimensions shown are based on standard sizes and capacities for typical building installations and should only be used for preliminary planning. Contact H-W for additional information before proceeding with construction or for assistance with existing or special conditions.

2. Dimensional data complies with the ASME A17.1 / CSA B44 Safety Code for Elevators and Escalators. State or local codes must be used if they differ from national code.

3. Interior cab dimensions may vary depending on the interior finishes. The platform and hoistway sizes should be increased accordingly for extra thick cab finishes.

4. Counterweight safeties are required if there is "occupied space" below the pit. Add 8" [203] to the hoistway and machine room depths listed.

5. Larger car sizes may be possible up to a maximum of 5,000# capacity. Consult with H-W engineering department.

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**HOISTWAY AND MACHINE ROOM DIMENSIONS**

<table>
<thead>
<tr>
<th>CAPACITY (lb [kg])</th>
<th>INSIDE AREA (MAX. SF ALLOWED PER CODE)</th>
<th>H1 CLEAR OPENING WIDTH (ft [mm])</th>
<th>H2 CLEAR OPENING WIDTH (ft [mm])</th>
<th>OPENING TYPE</th>
<th>MINIMUM CLEAR CAB INSIDE</th>
<th>PLATFORM SIZE</th>
<th>HOISTWAY SIZE (SEISMIC ZONE 0 - 4)</th>
<th>MACH. ROOM</th>
<th>MIN. OPNG</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000 (900)</td>
<td>24.2 [2.25]</td>
<td>3'-0&quot; [914]</td>
<td>3'-0&quot; [914]</td>
<td>TSSO (a)</td>
<td>5'-8&quot; [1727]</td>
<td>5'-2&quot; [1575]</td>
<td>E [SEE NOTE 4]</td>
<td>F [SEE NOTE 4]</td>
<td>15'-0&quot; [4572]</td>
</tr>
<tr>
<td>2,500 (1160)</td>
<td>29.1 [2.70]</td>
<td>3'-6&quot; [1067]</td>
<td>3'-0&quot; [914]</td>
<td>TSSO (b)</td>
<td>6'-8&quot; [2032]</td>
<td>5'-2&quot; [1575]</td>
<td>7'-6&quot; [2286]</td>
<td>7'-0&quot; [2134]</td>
<td>16'-0&quot; [4877]</td>
</tr>
<tr>
<td>3,500 (1600)</td>
<td>38.0 [3.53]</td>
<td>3'-6&quot; [1067]</td>
<td>3'-0&quot; [914]</td>
<td>TSSO (c)</td>
<td>6'-8&quot; [2032]</td>
<td>5'-2&quot; [1575]</td>
<td>E [SEE NOTE 4]</td>
<td>F [SEE NOTE 4]</td>
<td>16'-0&quot; [4877]</td>
</tr>
<tr>
<td>4,000 (1810)</td>
<td>42.2 [3.92]</td>
<td>4'-0&quot; [1219]</td>
<td>3'-0&quot; [914]</td>
<td>TSSO (c)</td>
<td>7'-8&quot; [2337]</td>
<td>6'-4&quot; [1930]</td>
<td>E [SEE NOTE 4]</td>
<td>F [SEE NOTE 4]</td>
<td>16'-0&quot; [4877]</td>
</tr>
</tbody>
</table>

a. These car dimensions and entrance types provide wheelchair accessibility.
b. These car dimensions and entrance types provide wheelchair accessibility and accommodate an ambulance type stretcher of (76"x24") in the horizontal position.
c. These car dimensions and entrance types provide wheelchair accessibility and accommodate an ambulance type stretcher of (84"x24") in the horizontal position as required by the IBC.
OVERHEAD GEARED TRACTION DESIGN GUIDE
Passenger, Front & Side Opening (Cornerpost), CWT at Rear

TOTAL CAR TRAVEL
7'-0" [2134] MIN. CLEAR

MIN. CLEAR OVERHEAD TO U/S OF MACHINE BMS.
7'-0" [2134] CLR. OPNG.

CAR ENCLOSURE (BY OTHERS)

1'-0" [305] (TYP.) BEAM SIZE AND SLAB DESIGN WILL DETERMINE FINAL DIMENSION

HOISTWAY SECTION
(DEFLECTOR SHV. IN MACHINE ROOM)

HOIST BEAM (BY OTHERS)

MIN. CLEAR OVERHEAD TO U/S OF MACHINE BMS.
7'-6" [2285] ROUGH OPNG.

BEAM SIZE AND SLAB DESIGN WILL DETERMINE FINAL DIMENSION

PIT DEPTH
OH1
OH2

RATED SPEED
fpm [m/s]
100 - 200 fpm [5.0 - 1.00 m/s]
250 - 350 fpm [1.25 - 1.75 m/s]
400 fpm [2.00 m/s]
450 fpm [2.25 m/s]
500 fpm [2.50 m/s]

MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. AT TOP OF HOISTWAY)
5'-6" [1676]
5'-8" [1727]
6'-0" [1829]
6'-9" [2057]
6'-9" [2057]

MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. IN MACHINE ROOM)
14'-3" [4343]
15'-4" [4674]
15'-8" [4775]
16'-3" [4963]
16'-5" [5004]

Overhead dimensions (OH) are based on an 8'-0" (2438mm) cab height with a 7'-0" (2134mm) door. For 9'-0" (2745) cab use OH + 1'-0" (305). For 10'-0" (3050) cab use OH + 2'-0" (610).
OVERHEAD GEARED TRACTION DESIGN GUIDE
Passenger, Front & Side Opening (Cornerpost), CWT at Side

NOTES:

1. Dimensions shown are based on standard sizes and capacities for typical building installations and should only be used for preliminary planning. Contact H-W for additional information before proceeding with construction or for assistance with existing or special conditions.
2. Dimensional data complies with the ASME A17.1 / CSA B44 Safety Code for Elevators and Escalators. State or local codes must be used if they differ from national code.
3. Interior cab dimensions may vary depending on the interior finishes. The platform and hoistway sizes should be increased accordingly for extra thick cab finishes.
4. Counterweight safeties are required if there is "occupied space" below the pit. This arrangement may not provide enough space to accommodate a counterweight safety. Consult with H-W engineering department.
5. Larger car sizes may be possible up to a maximum of 5,000# capacity. Consult with H-W engineering department.

HOISTWAY AND MACHINE ROOM DIMENSIONS

| CAPACITY | INSIDE AREA (MAX. SF ALLOWED PER CODE) | H1 OPENING WIDTH ft (mm) | OPENING TYPE (1) | H2 CLEAR OPENING WIDTH ft (mm) | OPENING TYPE (1) | MINIMUM CLEAR CAB INSIDE | PLATFORM SIZE | HOISTWAY SIZE (SEISMIC ZONE 0 - 4) | MACH. ROOM
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000 [900]</td>
<td>24.2 [2.25]</td>
<td>3'-0&quot; [914]</td>
<td>TSSO (a)</td>
<td>3'-0&quot; [914]</td>
<td>3SSO (a)</td>
<td>5'-8&quot; [1727]</td>
<td>4'-3&quot; [1295]</td>
<td>6'-8 1/2&quot; [2045]</td>
<td>5'-2&quot; [1575]</td>
</tr>
<tr>
<td>2,500 [1160]</td>
<td>29.1 [2.70]</td>
<td>3'-6&quot; [1067]</td>
<td>TSSO (b)</td>
<td>3'-0&quot; [914]</td>
<td>3SSO (b)</td>
<td>6'-8&quot; [2032]</td>
<td>4'-3&quot; [1295]</td>
<td>7'-8 1/2&quot; [2350]</td>
<td>5'-2&quot; [1575]</td>
</tr>
<tr>
<td>3,000 [1380]</td>
<td>33.7 [3.13]</td>
<td>3'-6&quot; [1067]</td>
<td>TSSO (b)</td>
<td>3'-0&quot; [914]</td>
<td>3SSO (b)</td>
<td>6'-8&quot; [2032]</td>
<td>4'-9&quot; [1448]</td>
<td>7'-7&quot; [2311]</td>
<td>5'-8&quot; [1727]</td>
</tr>
<tr>
<td>3,500 [1600]</td>
<td>38.0 [3.53]</td>
<td>3'-6&quot; [1067]</td>
<td>TSSO (c)</td>
<td>3'-6&quot; [1067]</td>
<td>TSSO (c)</td>
<td>6'-8&quot; [2032]</td>
<td>5'-5&quot; [1615]</td>
<td>7'-7&quot; [2311]</td>
<td>6'-4&quot; [1930]</td>
</tr>
<tr>
<td>4,000 [1810]</td>
<td>42.2 [3.52]</td>
<td>4'-0&quot; [1219]</td>
<td>TSSO (c)</td>
<td>3'-6&quot; [1067]</td>
<td>TSSO (c)</td>
<td>7'-8&quot; [2337]</td>
<td>5'-5&quot; [1615]</td>
<td>8'-7&quot; [2616]</td>
<td>6'-4&quot; [1930]</td>
</tr>
</tbody>
</table>

a. These car dimensions and entrance types provide wheelchair accessibility.
b. These car dimensions and entrance types provide wheelchair accessibility and accommodate an ambulance type stretcher of (76"x24") in the horizontal position.
c. These car dimensions and entrance types provide wheelchair accessibility and accommodate an ambulance type stretcher of (84"x24") in the horizontal position as required by the IBC.
OVERHEAD GEARED TRACTION DESIGN GUIDE
Passenger, Front & Side Opening (Cornerpost), CWT at Side

PIT DEPTH
OH1
5'-6" [1676]
14'-9 1/2" [4496]
14'-3 3/4" [4343]

OH2
5'-8" [1727]
15'-4" [4674]
14'-10" [4521]

100 - 200 fpm
[50 - 1.00 m/s]

250 - 350 fpm
[1.25 - 1.75 m/s]

400 fpm
[2.00 m/s]

450 fpm
[2.25 m/s]

500 fpm
[2.50 m/s]

MIN. OVERHEAD CLEAR TO U/S BMS.
(DEFLECTOR SHV. AT TOP OF HOISTWAY)

MIN. OVERHEAD CLEAR TO U/S BMS.
(DEFLECTOR SHV. IN MACHINE ROOM)

PIT AND OVERHEAD DIMENSIONS

RATED SPEED
fpm [m/s]

HOISTWAY SECTION
(DEFLECTOR SHV. IN MACHINE ROOM)

MIN. CLEAR
TO U/S BMS.
(DEFLECTOR SHV. AT TOP OF HOISTWAY)

OH1
OH2

Overhead dimensions (OH) are based on an 8'-0" [2438mm] cab height with a 7'-0" [2134mm] door. For 9'-0" [2745] cab use OH + 1'-0" [305]. For 10'-0" [3050] cab use OH + 2'-0" [610].

PIT FLR.

STL. PIT LADDER
(BY OTHERS)

H-W CWT.
FRAME WITH
GUARD

H-W SPRING OR
OIL BUFFERS
MOUNTED ON
PIT CHANNELS

TOTAL CAR TRAVEL

1'-4" [407]

BEAM SIZE AND SLAB DESIGN WILL
DETERMINE FINAL DIMENSION

MIN. CLEAR OVERHEAD
TO U/S OF MACHINE BMS.
(DEFLECTOR SHV. IN MACHINE ROOM)

OH1
7'-0" [2134]
MIN. CLEAR TO U/S BMS.

OH2
7'-0" [2134]

H-W OVERHEAD
GEARED TRACTION
MACHINE, MOUNTED
ON MACHINE BEAMS
OR ON STRUCTURAL
SLAB

H-W DEFLECTOR
SHEAVE

3'-6" [1067] HIGH
CAR TOP
RAILING AS
REQ'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

COMPENSATION
REQUIRED FOR
TRAVELS OVER
130'-0"

HOISTWAY SECTION
(DEFLECTOR SHV. AT TOP OF HOISTWAY)

ROPE GRIPPER
WITH MACHINE
MOUNTING

MACH. RM.

H-IN MACHINE
BLOCK-UP
STAND

REO'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

H-W CAR SLING AND
PLATFORM ASSY.

H-W OVERHEAD
GEARED TRACTION
MACHINE, MOUNTED
ON MACHINE BEAMS
OR ON STRUCTURAL
SLAB

H-W DEFLECTOR
SHEAVE

3'-6" [1067] HIGH
CAR TOP
RAILING AS
REQ'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

COMPENSATION
REQUIRED FOR
TRAVELS OVER
130'-0"

HOISTWAY SECTION
(DEFLECTOR SHV. IN MACHINE ROOM)

ROPE GRIPPER
WITH MACHINE
MOUNTING

MACH. RM.

H-IN MACHINE
BLOCK-UP
STAND

REO'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

H-W CAR SLING AND
PLATFORM ASSY.

H-W OVERHEAD
GEARED TRACTION
MACHINE, MOUNTED
ON MACHINE BEAMS
OR ON STRUCTURAL
SLAB

H-W DEFLECTOR
SHEAVE

3'-6" [1067] HIGH
CAR TOP
RAILING AS
REQ'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

COMPENSATION
REQUIRED FOR
TRAVELS OVER
130'-0"

HOISTWAY SECTION
(DEFLECTOR SHV. IN MACHINE ROOM)

ROPE GRIPPER
WITH MACHINE
MOUNTING

MACH. RM.

H-IN MACHINE
BLOCK-UP
STAND

REO'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

H-W CAR SLING AND
PLATFORM ASSY.

H-W OVERHEAD
GEARED TRACTION
MACHINE, MOUNTED
ON MACHINE BEAMS
OR ON STRUCTURAL
SLAB

H-W DEFLECTOR
SHEAVE

3'-6" [1067] HIGH
CAR TOP
RAILING AS
REQ'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

COMPENSATION
REQUIRED FOR
TRAVELS OVER
130'-0"

HOISTWAY SECTION
(DEFLECTOR SHV. IN MACHINE ROOM)

ROPE GRIPPER
WITH MACHINE
MOUNTING

MACH. RM.

H-IN MACHINE
BLOCK-UP
STAND

REO'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

H-W CAR SLING AND
PLATFORM ASSY.

H-W OVERHEAD
GEARED TRACTION
MACHINE, MOUNTED
ON MACHINE BEAMS
OR ON STRUCTURAL
SLAB

H-W DEFLECTOR
SHEAVE

3'-6" [1067] HIGH
CAR TOP
RAILING AS
REQ'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

COMPENSATION
REQUIRED FOR
TRAVELS OVER
130'-0"

HOISTWAY SECTION
(DEFLECTOR SHV. IN MACHINE ROOM)

ROPE GRIPPER
WITH MACHINE
MOUNTING

MACH. RM.

H-IN MACHINE
BLOCK-UP
STAND

REO'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

H-W CAR SLING AND
PLATFORM ASSY.

H-W OVERHEAD
GEARED TRACTION
MACHINE, MOUNTED
ON MACHINE BEAMS
OR ON STRUCTURAL
SLAB

H-W DEFLECTOR
SHEAVE

3'-6" [1067] HIGH
CAR TOP
RAILING AS
REQ'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

COMPENSATION
REQUIRED FOR
TRAVELS OVER
130'-0"

HOISTWAY SECTION
(DEFLECTOR SHV. IN MACHINE ROOM)

ROPE GRIPPER
WITH MACHINE
MOUNTING

MACH. RM.

H-IN MACHINE
BLOCK-UP
STAND

REO'D. BY ASME
A17.1 / CSA B44
(BY OTHERS)

H-W CAR SLING AND
PLATFORM ASSY.
NOTES:

1. Dimensions shown are based on standard sizes and capacities for typical building installations and should only be used for preliminary planning. Contact H-W for additional information before proceeding with construction or for assistance with existing or special conditions.

2. Dimensional data complies with the ASME A17.1 / CSA B44 Safety Code for Elevators and Escalators. State or local codes must be used if they differ from national code.

3. Interior cab dimensions may vary depending on the interior finishes. The platform and hoistway sizes should be increased accordingly for extra thick cab finishes.

4. Counterweight safeties are required if there is "occupied space" below the pit. Add 8" [203] to the hoistway and machine room widths listed and 6" [152] to the hoistway and machine room depths listed for each elevator.

5. These car dimensions and entrance types provide wheelchair accessibility and accommodate an ambulance type stretcher of (84"x24") in the horizontal position as required by the IBC.
OVERHEAD GEARED TRACTION DESIGN GUIDE
Hospital / Service, Front Opening, CWT at Side

**Rated Speed**
- 100 - 200 fpm
- 250 - 350 fpm
- 400 fpm
- 450 fpm
- 500 fpm

**Pit and Overhead Dimensions**

<table>
<thead>
<tr>
<th>Rated Speed fpm [m/s]</th>
<th>Pit Depth</th>
<th>Min. Overhead Clear to U/S BMS. (Deflector Shv. at Top of Hoistway)</th>
<th>Min. Overhead Clear to U/S BMS. (Deflector Shv. in Machine Room)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P</td>
<td>OH1</td>
<td>OH2</td>
</tr>
<tr>
<td>100 - 200 fpm [0.50 - 1.00 m/s]</td>
<td>6'-6&quot; [1981]</td>
<td>14'-7&quot; [4445]</td>
<td>13'-5&quot; [4089]</td>
</tr>
<tr>
<td>250 - 350 fpm [1.25 - 1.75 m/s]</td>
<td>6'-0&quot; [1829]</td>
<td>15'-2&quot; [4623]</td>
<td>14'-0&quot; [4267]</td>
</tr>
<tr>
<td>400 fpm [2.00 m/s]</td>
<td>6'-3&quot; [1905]</td>
<td>15'-6&quot; [4725]</td>
<td>14'-4&quot; [4369]</td>
</tr>
<tr>
<td>450 fpm [2.25 m/s]</td>
<td>6'-10&quot; [2083]</td>
<td>16'-1&quot; [4902]</td>
<td>14'-11&quot; [4547]</td>
</tr>
<tr>
<td>500 fpm [2.50 m/s]</td>
<td>6'-10&quot; [2083]</td>
<td>16'-3&quot; [4953]</td>
<td>15'-1&quot; [4597]</td>
</tr>
</tbody>
</table>

Overhead dimensions (OH) are based on an 8'-0" [2438mm] cab height with a 7'-0" [2134mm] door. For 9'-0" [2745mm] cab use OH + 1'-0" [305]. For 10'-0" [3050mm] cab use OH + 2'-0" [610].
# OVERHEAD GEARED TRACTION DESIGN GUIDE

## Hospital / Service, Front & Rear Opening, CWT at Side

### CAPACITY

<table>
<thead>
<tr>
<th>Capacity</th>
<th>lb [kg]</th>
<th>Inside Area (Max. SF Allowed Per Code)</th>
<th>H Clear Opening Width [mm]</th>
<th>Opening Type (1)</th>
<th>Minimum Clear Cab Inside</th>
<th>Platform Size</th>
<th>Hoistway Size (Non-Seismic)</th>
<th>Hoistway Size (Seismic Zone 2 or Greater)</th>
<th>Machine Room Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,500</td>
<td>1600</td>
<td>38.0 [3.53]</td>
<td>3'-10&quot;</td>
<td>TSSO (a)</td>
<td>5'-2&quot; [1575]</td>
<td>7'-4&quot; [2235]</td>
<td>8'-0&quot; [2438]</td>
<td>10'-4&quot; [3150]</td>
<td>16'-4&quot; [4978]</td>
</tr>
<tr>
<td>4,000</td>
<td>1815</td>
<td>42.2 [3.92]</td>
<td>4'-0&quot;</td>
<td>TSSO (a)</td>
<td>5'-8&quot; [1727]</td>
<td>7'-4&quot; [2235]</td>
<td>8'-4&quot; [2642]</td>
<td>10'-10&quot; [3302]</td>
<td>17'-4&quot; [5283]</td>
</tr>
<tr>
<td>4,500</td>
<td>2045</td>
<td>46.2 [4.29]</td>
<td>4'-0&quot;</td>
<td>TSSO (a)</td>
<td>5'-8&quot; [1727]</td>
<td>7'-10&quot; [2388]</td>
<td>8'-4&quot; [2642]</td>
<td>10'-10&quot; [3302]</td>
<td>18'-0&quot; [5486]</td>
</tr>
<tr>
<td>5,000</td>
<td>2275</td>
<td>50.0 [4.65]</td>
<td>4'-0&quot;</td>
<td>TSSO (a)</td>
<td>5'-8&quot; [1727]</td>
<td>8'-6&quot; [2591]</td>
<td>10'-2&quot; [3112]</td>
<td>11'-6&quot; [3505]</td>
<td>18'-4&quot; [5690]</td>
</tr>
</tbody>
</table>

### NOTES:

1. Dimensions shown are based on standard sizes and capacities for typical building installations and should only be used for preliminary planning. Contact H-W for additional information before proceeding with construction or for assistance with existing or special conditions.
2. Dimensional data complies with the ASME A17.1 / CSA B44 Safety Code for Elevators and Escalators. State or local codes must be used if they differ from national code.
3. Interior cab dimensions may vary depending on the interior finishes. The platform and hoistway sizes should be increased accordingly for extra thick cab finishes.
4. Counterweight safeties are required if there is "occupied space" below the pit. Add 8" [203] to the hoistway and machine room widths listed for each elevator.

### HOISTWAY AND MACHINE ROOM DIMENSIONS

- **Minimum Clear Cab Inside**
- **Platform Size**
- **Hoistway Size (Non-Seismic)**
- **Hoistway Size (Seismic Zone 2 or Greater)**
- **Machine Room Dimensions**

### HOISTWAY PLAN

- **STL. PIT LADDER (BY OTHERS)**
- **DIVIDER BEAMS (BY OTHERS)**
- **TO BE DESIGNED TO SUSTAIN RAIL FORCES**

### MACHINE ROOM PLAN

- **LOCATION OF MAIN POWER DISCONNECTING MEANS, THE CAR LIGHT DISCONNECTING MEANS, AND LIGHTING SWITCH SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF NFPA 70.**
Overhead geared traction design guide
Hospital / Service, Front & Rear Opening, CWT at Side

Rated Speed

<table>
<thead>
<tr>
<th>FPM</th>
<th>m/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 200</td>
<td>0.50 - 1.00</td>
</tr>
<tr>
<td>250 - 350</td>
<td>1.25 - 1.75</td>
</tr>
<tr>
<td>400</td>
<td>2.00</td>
</tr>
<tr>
<td>450</td>
<td>2.25</td>
</tr>
<tr>
<td>500</td>
<td>2.50</td>
</tr>
</tbody>
</table>

Pit and Overhead Dimensions

<table>
<thead>
<tr>
<th>Pit Depth</th>
<th>Min. Overhead Clear to U/S BMS. (Deflector Shv. at Top of Hoistway)</th>
<th>Min. Overhead Clear to U/S BMS. (Deflector Shv. in Machine Room)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OH1</td>
<td>14'-7&quot; [4445]</td>
<td>13'-5&quot; [4089]</td>
</tr>
<tr>
<td>OH2</td>
<td>14'-4&quot; [4369]</td>
<td>14'-11&quot; [4547]</td>
</tr>
</tbody>
</table>

Overhead dimensions (OH) are based on an 8'-0" [2438mm] cab height with a 7'-0" [2134mm] door. For 9'-0" [2745mm] cab use OH + 1'-0" [305]. For 10'-0" [3050mm] cab use OH + 2'-0" [610].
NOTES:

1. Dimensions shown are based on standard sizes and capacities for typical building installations and should only be used for preliminary planning. Contact H-W for additional information before proceeding with construction or for assistance with existing or special conditions.

2. Dimensional data complies with the ASME A17.1 / CSA B44 Safety Code for Elevators and Escalators. State or local codes must be used if they differ from national code.

3. Interior cab dimensions may vary depending on the interior finishes. The platform and hoistway sizes should be increased accordingly for extra thick cab finishes.

4. Counterweight safeties are required if there is "occupied space" below the pit. Add 8" [203] to the hoistway and machine room widths listed and 6" [152] to the hoistway and machine room depths listed for each elevator.

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**HOISTWAY AND MACHINE ROOM DIMENSIONS**

<table>
<thead>
<tr>
<th>CAPACITY (lb [kg])</th>
<th>INSIDE AREA (MAXIMUM SQ. FT. ALLOWED PER CODE)</th>
<th>H CLEAR OPENING WIDTH [mm]</th>
<th>OPENING TYPE (1)</th>
<th>MINIMUM CLEAR CAB INSIDE</th>
<th>PLATFORM SIZE</th>
<th>HOISTWAY SIZE (NON-SEISMIC &amp; SEISMIC ZONES)</th>
<th>MACH. ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A WIDTH ft [mm]</td>
<td>B DEPTH ft [mm]</td>
<td>C WIDTH ft [mm]</td>
<td>D DEPTH ft [mm]</td>
<td>E CLR. WIDTH ft [mm]</td>
<td>F CLR. DEPTH ft [mm]</td>
</tr>
<tr>
<td>6,000 (2720)</td>
<td>57.7 [5.36]</td>
<td>[12724]</td>
<td>TSSO (a)</td>
<td>6'-6&quot; [1981]</td>
<td>10'-6&quot; [3203]</td>
<td>9'-0&quot; [2743]</td>
<td>10'-6&quot; [3200]</td>
</tr>
<tr>
<td>7,000 (3175)</td>
<td>65.3 [6.07]</td>
<td>[1524]</td>
<td>TSSO (a)</td>
<td>6'-6&quot; [1981]</td>
<td>10'-6&quot; [3203]</td>
<td>9'-0&quot; [2743]</td>
<td>10'-6&quot; [3200]</td>
</tr>
<tr>
<td>8,000 (3630)</td>
<td>72.9 [6.77]</td>
<td>[1524]</td>
<td>TSSO (a)</td>
<td>6'-6&quot; [1981]</td>
<td>10'-6&quot; [3203]</td>
<td>9'-0&quot; [2743]</td>
<td>10'-6&quot; [3200]</td>
</tr>
<tr>
<td>10,000 (4535)</td>
<td>88.0 [8.17]</td>
<td>[1524]</td>
<td>TSSO (a)</td>
<td>6'-6&quot; [1981]</td>
<td>10'-6&quot; [3203]</td>
<td>9'-0&quot; [2743]</td>
<td>10'-6&quot; [3200]</td>
</tr>
</tbody>
</table>

a. These car dimensions and entrance types provide wheelchair accessibility and accommodate an ambulance type stretcher of (84"x24") in the horizontal position as required by the IBC.
OVERHEAD GEARED TRACTION DESIGN GUIDE
Trauma, Front Opening, CWT at Side

PIT AND OVERHEAD DIMENSIONS

<table>
<thead>
<tr>
<th>RATED SPEED</th>
<th>PIT DEPTH</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. AT TOP OF HOISTWAY)</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS. (DEFLECTOR SHV. IN MACHINE ROOM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 200 fpm [5.0 - 1.0 m/s]</td>
<td>5'-6&quot; [1677]</td>
<td>15'-10&quot; [4826]</td>
<td>14'-6&quot; [4420]</td>
</tr>
<tr>
<td>250 - 350 fpm [1.25 - 1.75 m/s]</td>
<td>6'-0&quot; [1829]</td>
<td>16'-5&quot; [5004]</td>
<td>15'-1&quot; [4597]</td>
</tr>
</tbody>
</table>

All overhead dimensions (OH) are based on an 8'-0" [2438mm] cab height with a 7'-0" [2134mm] door. For 9'-0" [2745] high cab use OH + 1'-0" [305]. For 10'-0" [3050] high cab use OH + 2'-0" [610].

* Over 8000# [3630] capacity - Add 6" [152] to pit depth.

** Over 8000# [3630] capacity - maximum speed of 250 fpm.

All dimensions are in inches [mm].

Bulletin 1179
PUR #1084, EBB
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**OVERHEAD GEARED TRACTION DESIGN GUIDE**

Trauma, Front & Rear Opening, CWT at Side

**HOISTWAY PLAN**

**MACHINE ROOM PLAN**

**HOISTWAY AND MACHINE ROOM DIMENSIONS**

<table>
<thead>
<tr>
<th>CAPACITY</th>
<th>INSIDE AREA (MAXIMUM SQ. FT. ALLOWED PER CODE)</th>
<th>H CLEAR OPENING WIDTH ft [mm]</th>
<th>OPENCING TYPE (1)</th>
<th>MINIMUM CLEAR CAB INSIDE A WIDTH ft [mm]</th>
<th>B DEPTH [mm]</th>
<th>C WIDTH ft [mm]</th>
<th>D DEPTH ft [mm]</th>
<th>HOISTWAY SIZE (NON-SEISMIC &amp; SEISMIC ZONES)</th>
<th>MACH. ROOM DEPTH ft [mm]</th>
</tr>
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<tbody>
<tr>
<td>6,000</td>
<td>57.7 [5.36]</td>
<td>6'-0&quot; [1828]</td>
<td>TSSO (a)</td>
<td>6'-0&quot; [1828]</td>
<td>5'-0&quot; [1524]</td>
<td>6'-10&quot; [1828]</td>
<td>10'-4&quot; [3150]</td>
<td>9'-0&quot; [2743]</td>
<td>9'-0&quot; [2743]</td>
</tr>
<tr>
<td>7,000</td>
<td>68.5 [6.67]</td>
<td>6'-0&quot; [1828]</td>
<td>TSSO (a)</td>
<td>6'-0&quot; [1828]</td>
<td>5'-0&quot; [1524]</td>
<td>6'-10&quot; [1828]</td>
<td>11'-6&quot; [3505]</td>
<td>9'-0&quot; [2743]</td>
<td>9'-0&quot; [2743]</td>
</tr>
<tr>
<td>8,000</td>
<td>77.2 [6.77]</td>
<td>6'-0&quot; [1828]</td>
<td>TSSO (a)</td>
<td>6'-0&quot; [1828]</td>
<td>5'-0&quot; [1524]</td>
<td>6'-10&quot; [1828]</td>
<td>12'-4&quot; [3741]</td>
<td>9'-0&quot; [2743]</td>
<td>9'-0&quot; [2743]</td>
</tr>
<tr>
<td>10,000</td>
<td>88.0 [8.17]</td>
<td>6'-0&quot; [1828]</td>
<td>TSSO (a)</td>
<td>6'-0&quot; [1828]</td>
<td>5'-0&quot; [1524]</td>
<td>6'-10&quot; [1828]</td>
<td>13'-0&quot; [4115]</td>
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<th>MIN. OVERHEAD CLEAR TO U/S BMS.</th>
<th>MIN. OVERHEAD CLEAR TO U/S BMS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>fpm [m/s]</td>
<td>OH1</td>
<td>OH2</td>
<td>OH1</td>
</tr>
<tr>
<td>100 - 200</td>
<td>5'-6&quot; [1.7m]</td>
<td>15'-10&quot; [4.6m]</td>
<td>14'-6&quot; [4.4m]</td>
</tr>
<tr>
<td>300 - 350</td>
<td>6'-0&quot; [1.8m]</td>
<td>16'-6&quot; [5.0m]</td>
<td>15'-1&quot; [4.6m]</td>
</tr>
</tbody>
</table>

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All overhead dimensions (OH) are based on an 8'-0" [2438mm] cab height with a 7'-0" [2134mm] door. For 9'-0" [2743mm] high cab use OH + 1'-0" [305]. For 10'-0" [3050mm] high cab use OH + 2'-0" [610].